

GEORGE ENGELMANN BOTANICAL NOTEBOOKS

*Pagination Note:
Since many of the items lack a specific
page number, the page number displayed
online refers to the sequentially created
number each item was given upon
cataloging the materials.*

Alismaceae Hb. Martius.

Nov. 1857.

Agitt. pusilla Blum. Journ. Fl. Jelleng. 691

Hügel Ind. or. is the same
Notes omitted.

= *S. Blumi* Roth (no, Knuth)

Sag. guineensis Hoch.: Chlorovarieg. plant.

Wollichengel, Parman-bo 754

Alism. cuneatum Hochst. Condof - Hobdy
fol. ex. involat. panicula contracta multiflora 192

A. flava Thunb. ? Japan 98

leaves - purple Cox, much like
A. Plantag.

Alism. floribunda Schult. Brasil waters.

= *Sag. t. brasiliensis*: Mart. long leaves
9-ribbed, broad ovate, truncate at base;
veins numerous, verticillate manyflowered

A. grandiflora Chou. Yellow lg. Brasil
leaves similar, very simple, fl. much larg.

A. hamiltoniana Willd. Napoli 1821 4993. b.

Habit similar to the Indian *Peltaria*, Cal. Willd.
leaves more sagittate, lax, lobes

A. obtusa Mart. Brasil



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved

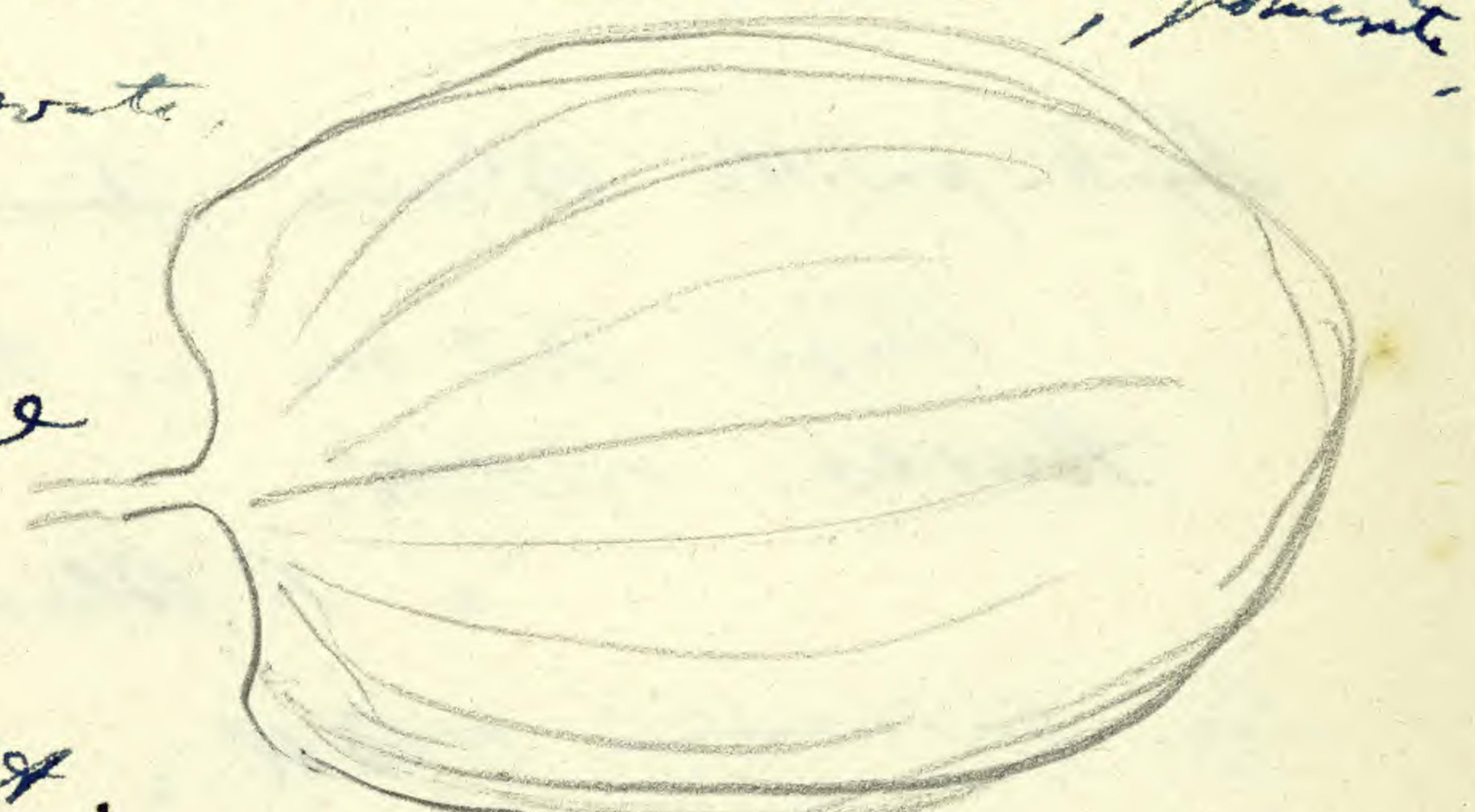


MISSOURI
BOTANICAL
GARDEN

Agitanis palae folia Rees et Mart. Nov p. 21

shape short simple, fl. verticillat subsessile, glomerate
base 3 x 2 inches wide,
triangular at base and
subcordate.

Burit Ting May 1912

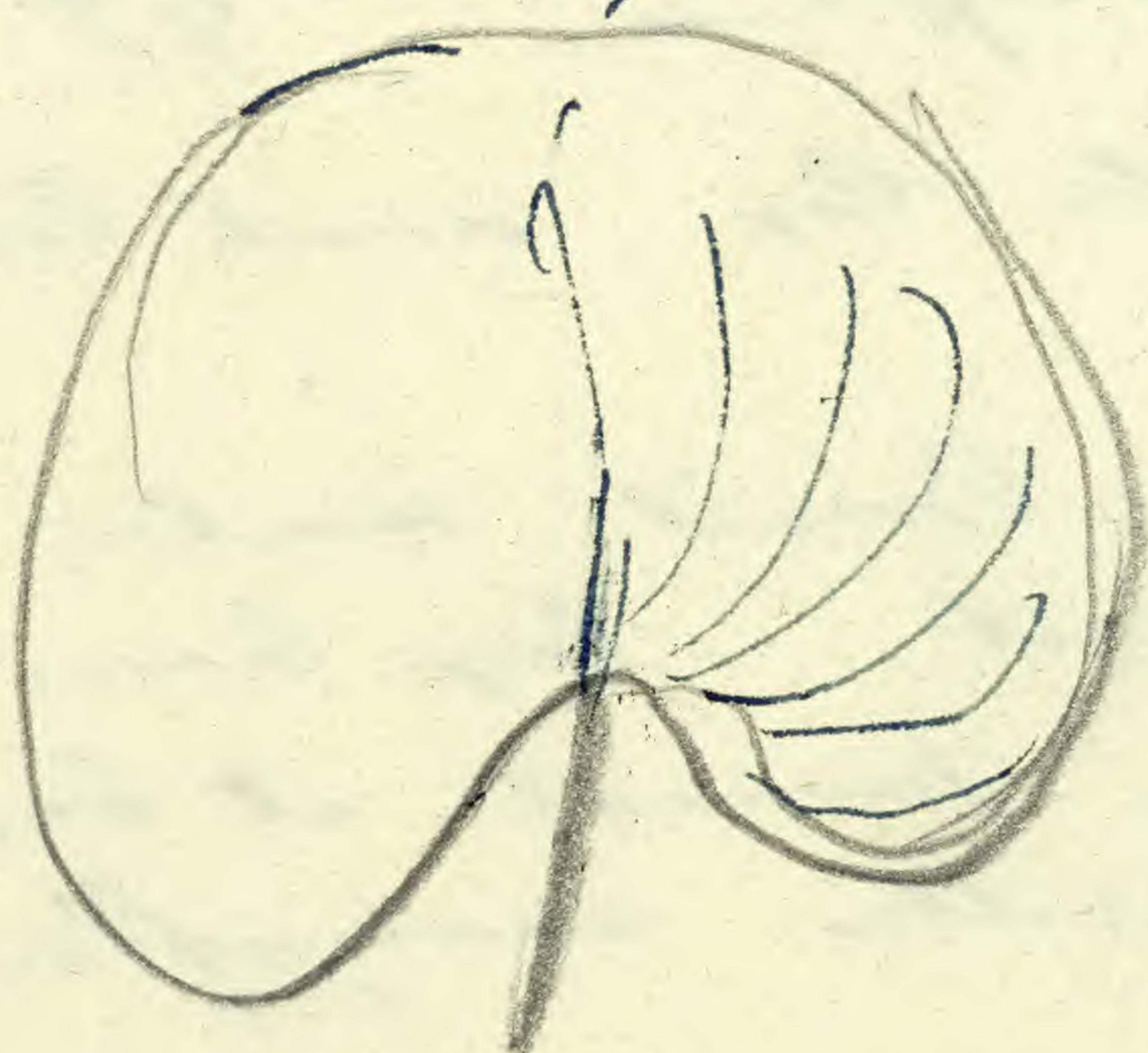


Alism. pubescens Mart.

B. Clausenii Schlecht, Gravil Clausen.

large leaf ~~acute~~, broad, ^{351.} triangular at base
15 ribbed.

Alisma reniforme Don? Wallach, Nepal.



Habit of *Alism. plantago*
s. paniculatum

B. A. ranunculoides makes
a repeat form; ~~one~~ exactly
like my *E. pusillum*, and
this makes it still more probable
that this *E. pusillum* belongs to
Alisma temulum Mart. but
examine seeds and flowers

A. leucomium Mart. Clausen No. 50

a small form, a larger one leaves in way



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Lat. rapos & 3 other leg.

Synd. variabilis *gracilis* }
 nutata }

S. pusilla

S. gracilis dark var. with

These are all
Martius' A. Am.

Syndemic

S. acutifolia Linn " Wall's Regel Surinam 493

" is a large form with narrow leaves of *lanceolata*
blade of leaf $8-10'' \times 1\frac{1}{2}''$ plants pubescent.
Wall's NL. 1566 is the same thing with broad leaves



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

10147

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Herb. Mus. Palat. Vienna

Jan. 1858

Alismum Plantago Europe Am. bor. *Amelaga*,
A. tenellum Mart. Brazil *Nos Hollands.*
A. ranunculoides Cogn.

spinosus

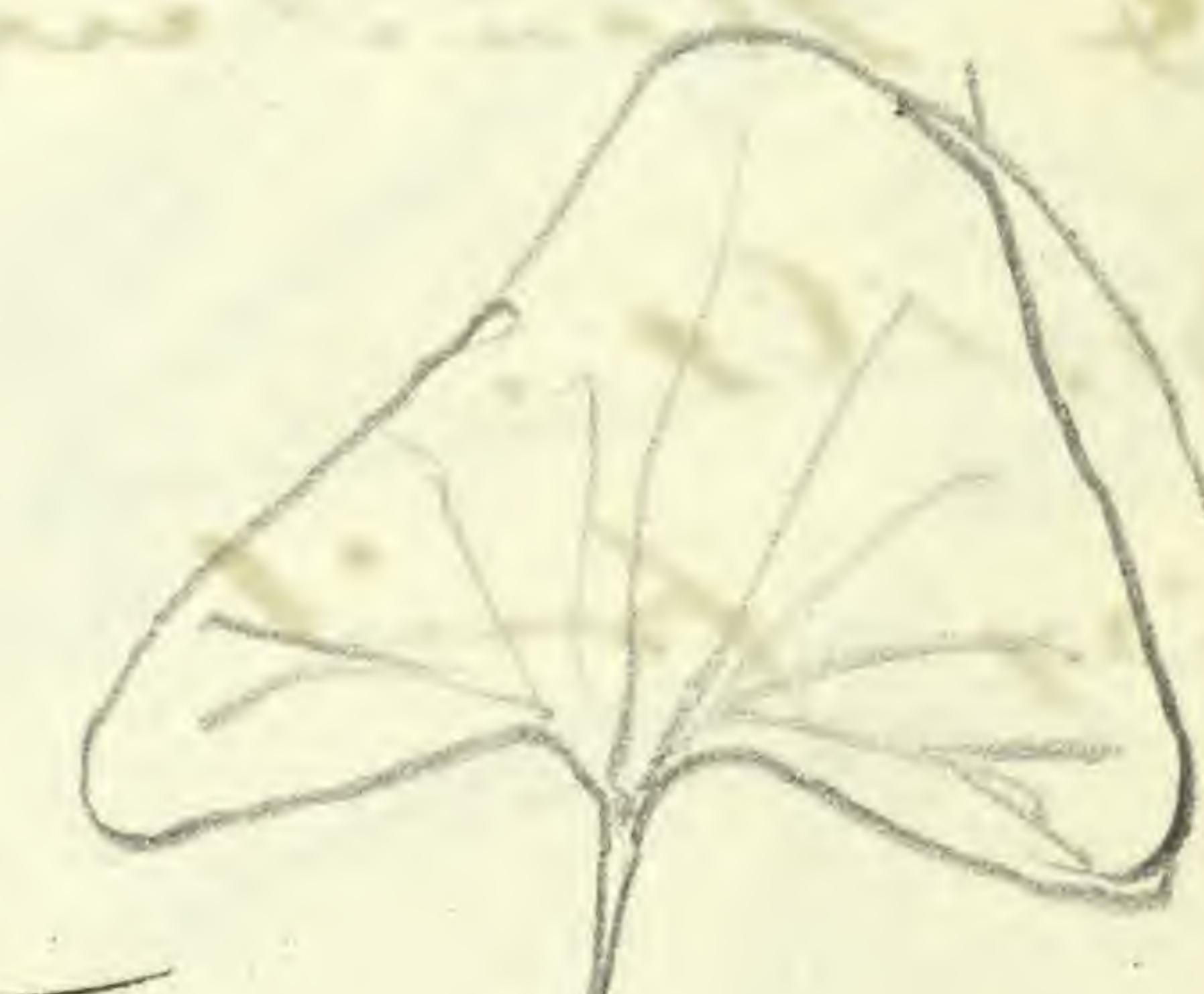
A. rotundatum

A. parvissimum

A. macrophyllum Kth. Gardn 700

fl 4x4" femina

bract. nervos laevol acumin
verticill multiflor



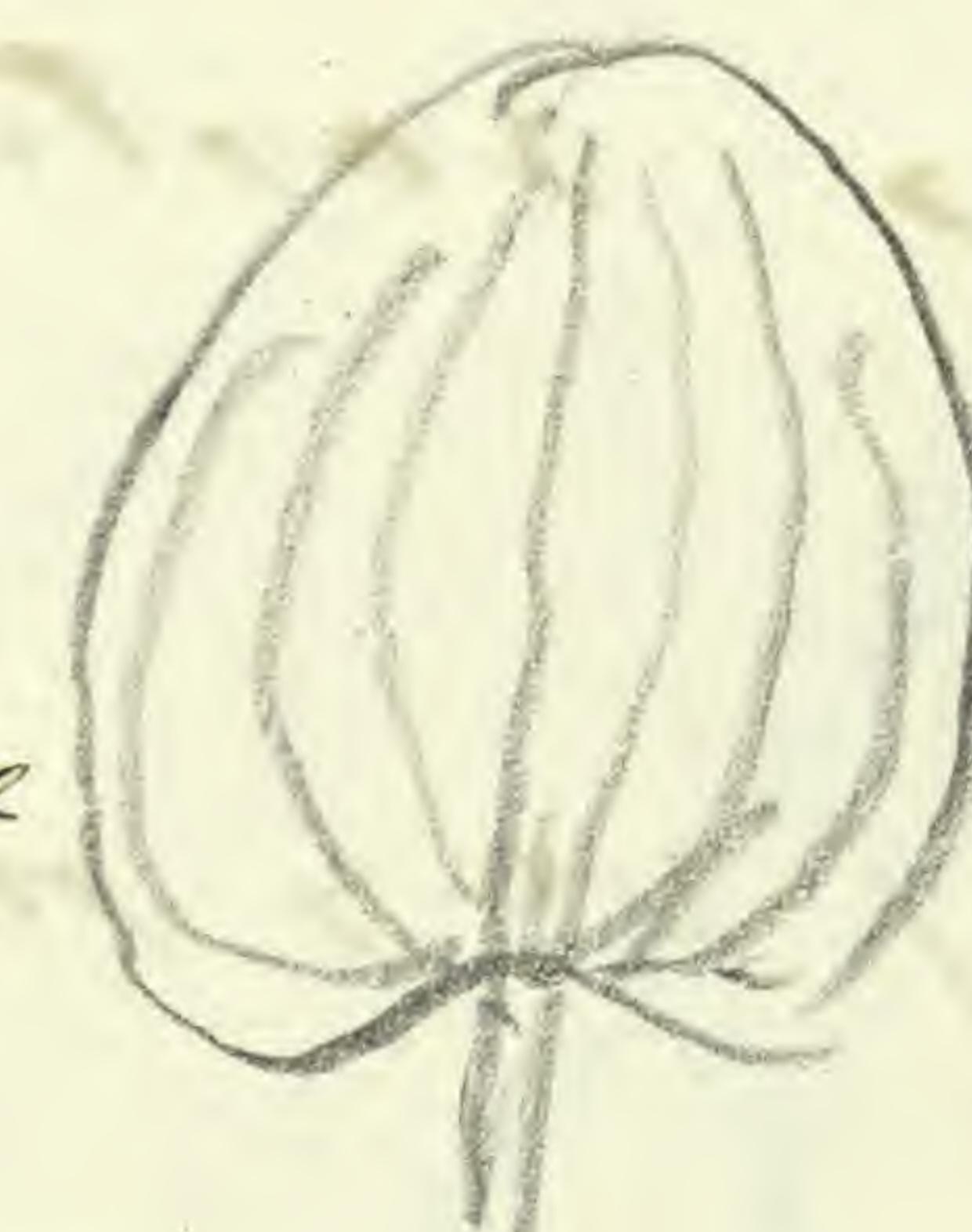
A. cordifolium Maury. ped. in elongat

A. grandiflorum Ch. bract.

fl 5x5' nervosa

bract. subulat condit elongat

pedicell brac.



A. pubescens Mart. seems very similar

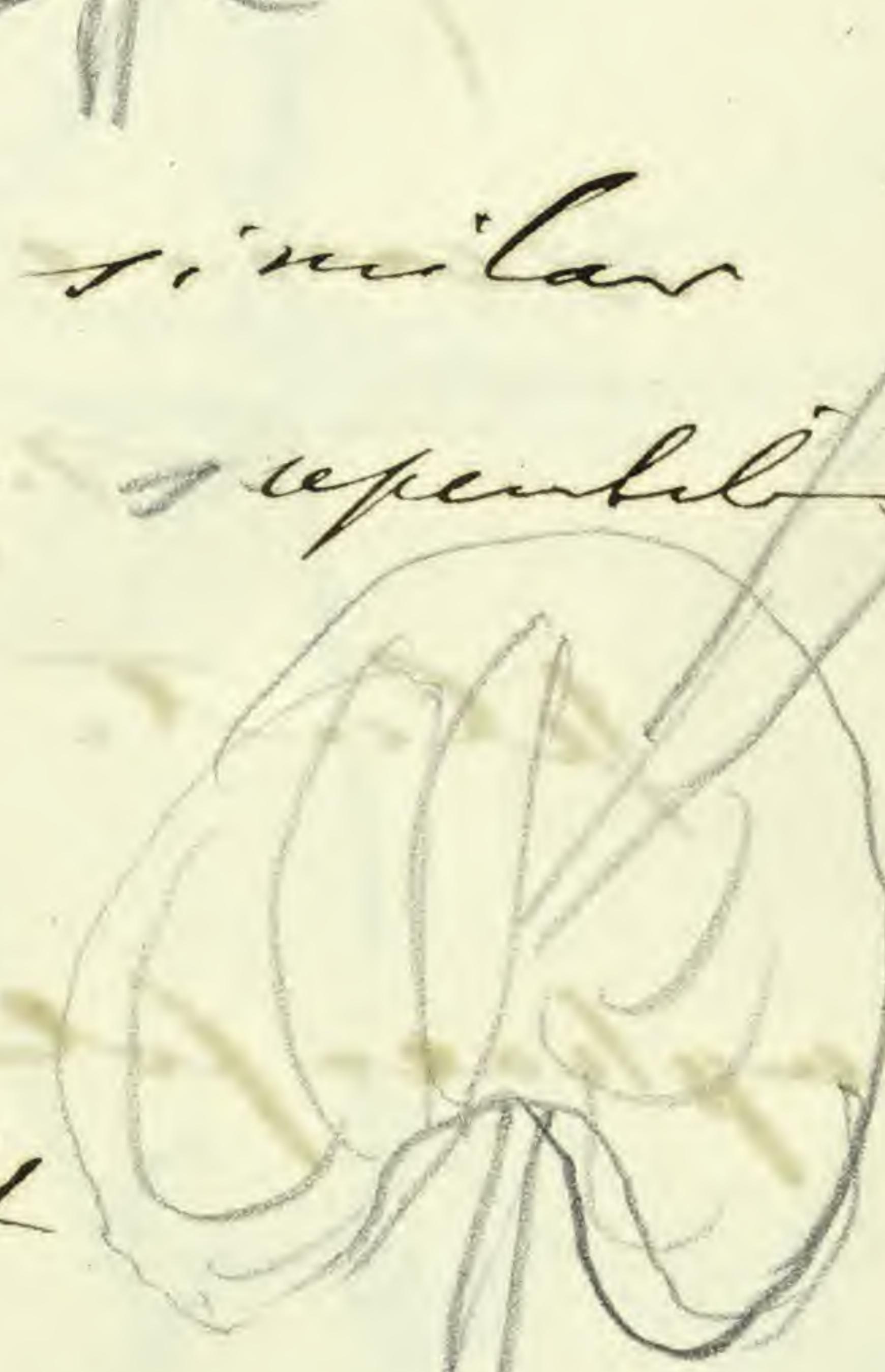
A. heterodoxum Mart. bract. flor. suspendit
linearis

A. floribundum Scub. Gardn 1860

fl 5x5' pedalia rigida

vertic. multiflor. bract. laevol

acuminat. pedicellis bruniens



A. chloroasperum Scub. Gardn 2738 calyx clausus
vertic. - pedicell. annularis pedicelli nisi rotat
(z. revoluti?)

A. Andromedae H. & A. Bl. Andri. 91

bract. condit. elongat subulat vertic. multiflor

fl ovato - laevol pedicell. tenuis



0
cm

1

2

3

4

5

6

7

8

9


10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Port Natal, 275 & 488. *Guernseyi* can not belong here
leaves of *A. Malaya*, slender much longer
spica, with short
alternate bracts
and slender
pedicels.
hairy fruit



Ecklonia rostrata For Drummond Texas 422.421

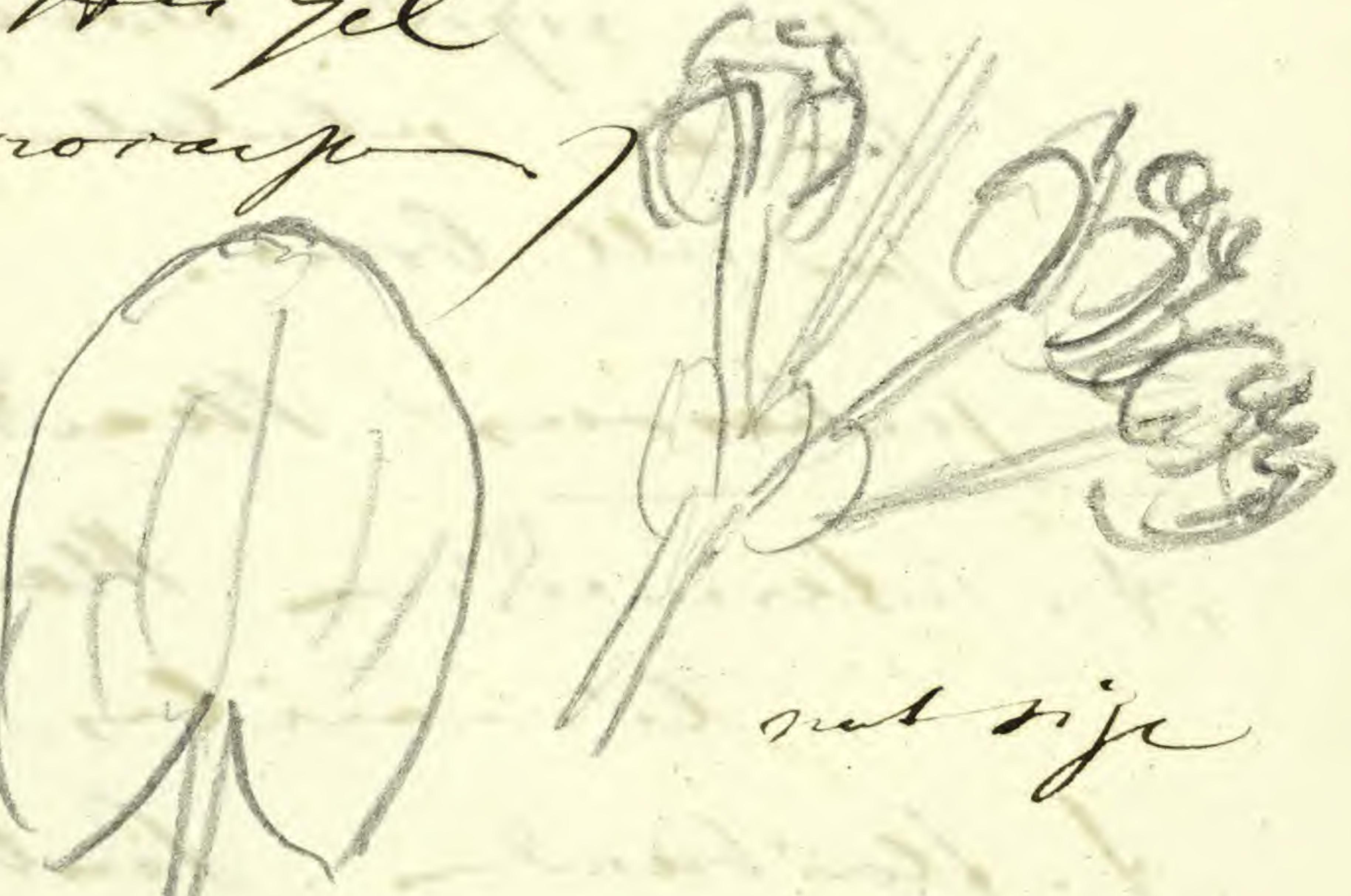
Slender *Himalaya* Higel

/ very similar to *Ecklonia* /

near. *echinata*

T. polystachys Cristat

Plantae semi-pedalis



A. pygmaea foli undulata Bojer

Sagittaria sagittifolia Linn

S. variabilis & var *quadrifolia*, Lister, Big Max
etc.

S. calycina Engelm. Drummond 424 Texas



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

21 Sagitt. Nicaragua, San Juan, Friedrichs 520
scape 2/3 pale light, no leaves. Bracts ovate acute
concave, not nervose, or slightly so,
pedicels slender, equally long in
male & female —

S. obtusifoli Juss.

1/2 or 1/3
of nut size

21 *S. Mexicana* Benth. 754.

with very long Iotot
pedicels is the same
as *Jussiaea*'s ped.

bracts oblique obtuse
membranous
ovate-lanceolate

S. macrophylla Juss.

S. stadii Oaxac 92.

bracts acute

pedicels of male & female
slender, and
equally long



0
cm

1 2 3 4 5 6 7 8 9 10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

10148

Sagitt.

Texas Durum.

leaf large hastate, lobes
trapezoid, ^{single} flowers part
bracts lanceolate aristate acuminate,
pedicels very slender, male & female
equal

crosses other

[*S. graminum* major?]

Sag. Natans Cusick
A. B.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1 2 3 4 5 6 7 8 9 10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

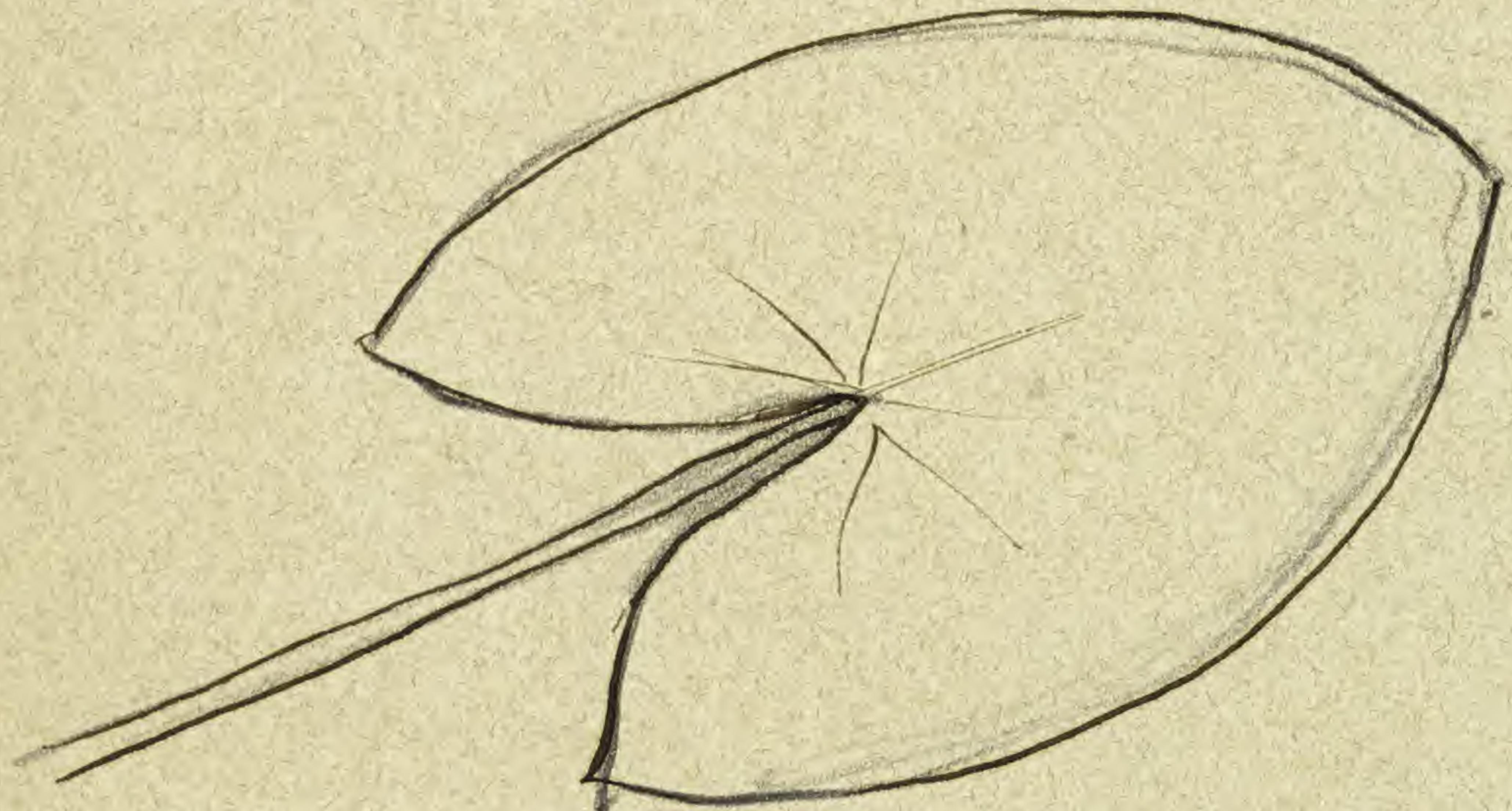
Sagittaria

Berlin 1857

Hub. Willd.

N 17558 *Sagittaria obtusifolia* L. ramosiss., fruit globose
17559 *S. cuneata* W. K. (name by Kerst) *S. guianensis*
Augostus, Humboldt.

Sp.



fruct. ovat.
obtus., membranous

17560 *S. natans* subhelig in dit is perhaps a natural
form of *S. simplex* — an incomplete Speci —
17561 *S. obtusifolia* Willd. 4. 411 — *S. Sellowiana* R. Br. — is
like a very narrow-leaved *filiformis* — *filiformis*
subulatis pubescens! — ramoso —
17562 *S. lanceolata* — leaf no lirality — leaf-venation
= *S. palustris* — large plant
7115 *Alisma subulata* Bosc. Virginia is Sagitt.
pumila fl. panicul. singulo ramoso



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

10149

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1 2 3 4 5 6 7 8 9 10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Herb. Fogg & Monat.

Nov 1857

Vayttaria natans Pallas

= T. alpina Willd

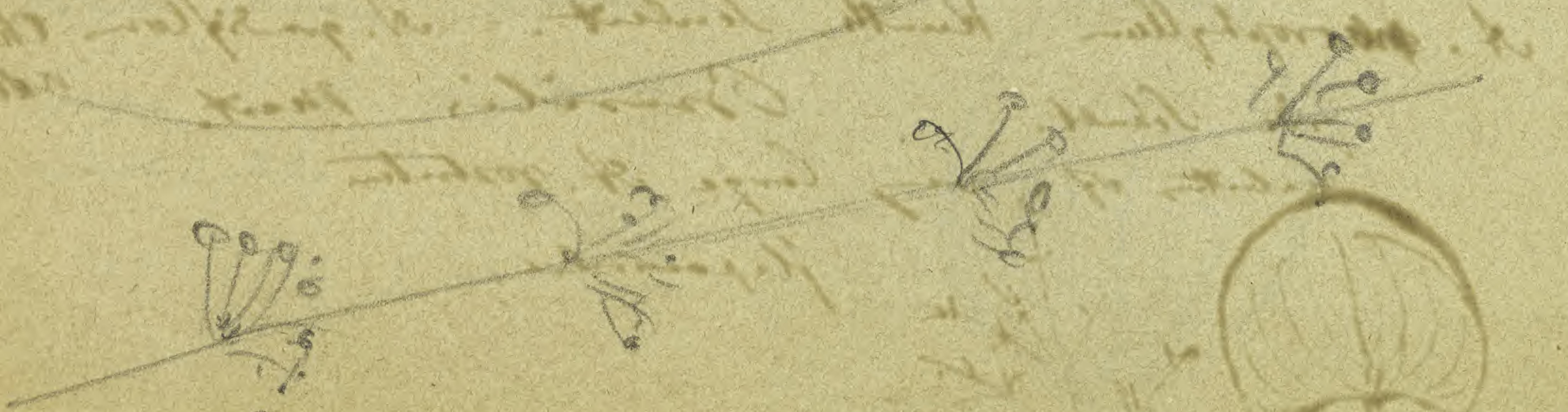
female peduncles
pedicels very thick
and short.

Alisma

A. cordifolium Lin Antigua (West Indies) $\frac{1}{2}$ - 3 pedicels
Wellschlegel looks like our A. rotundatum

Alisma, Andriants 91 Caxaro Sept 1857.
large ovate leaf, long mucronate scape,
5 ribs of leaf

A. rotundatum



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Alism tenellum Martius Spise 618 Tern' —
very similar to our *Phaneris* *pusillus*,
but prophylls pedicels erect

In the original pl. of Martius the pedicels are lax
and flexuous — no trace of creeping or rooting
in either species

Alism subalatum Mart. fol. lanceolate abbrvnt
- 7 sp. long $5\frac{1}{2}$ " fl. vermicill. — ped. pubescent $2\frac{1}{2}$ "

A. subalatum Mart! is a large pl. with ovate-lanceolate
leaves, $6\frac{1}{2}$ " by $2\frac{1}{2}$ " long. 5 nbbns.
bracts subulat. long fl. vermicillat. scape long.
with many ^{stat.} vermicillles,

A. subalat. var. *intervallata*. fol. elongat lance lanceolate
(6×1 in.) 3 nbbns.

A. repens Cav. prope Abu-Jabel, Egypti inf. Schrupper
Nm. itin. 1835

looks very much like our *Phan. pusillus* —

A. pubescens Mart. fol ovate ($3 \times 1\frac{1}{2}$ ") 5-7 nbbns.
bract. ovate acum. anitatis; on scape & pedicell
pubescent. — fl. vermicillat.

Alism. Europe. & Am. br. plant. parviss. nat. rarer

A. macrophyllum Kunth. Seulent. = *A. quadrifolium* Chaus.
fide Schult. Brasilis Mart. ^{aff.} *Phaneris*
habitus of a very large *A. rostratum*
fl. paucifl.



0
cm

1

2

3

4

5

6

7

8

9

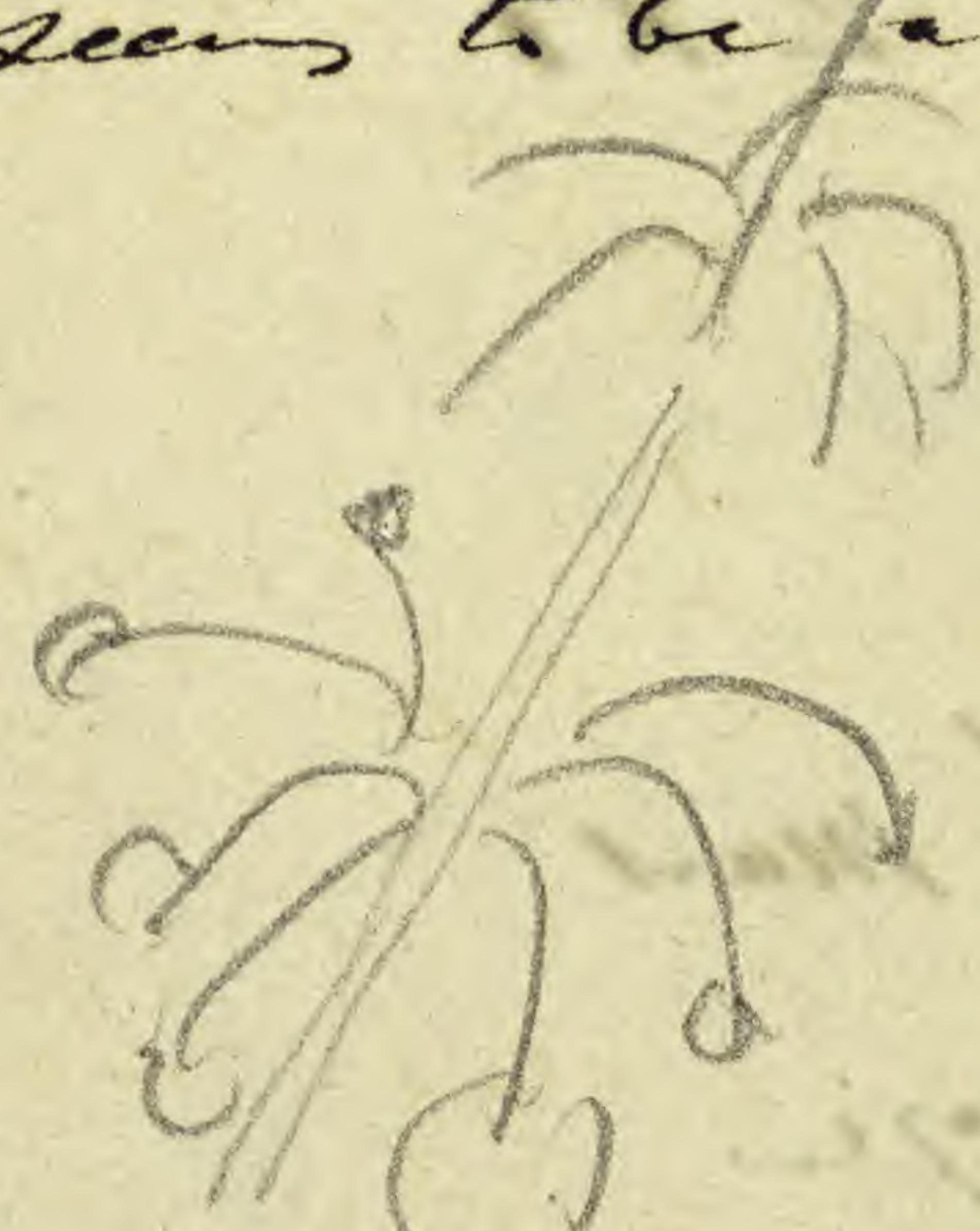
10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

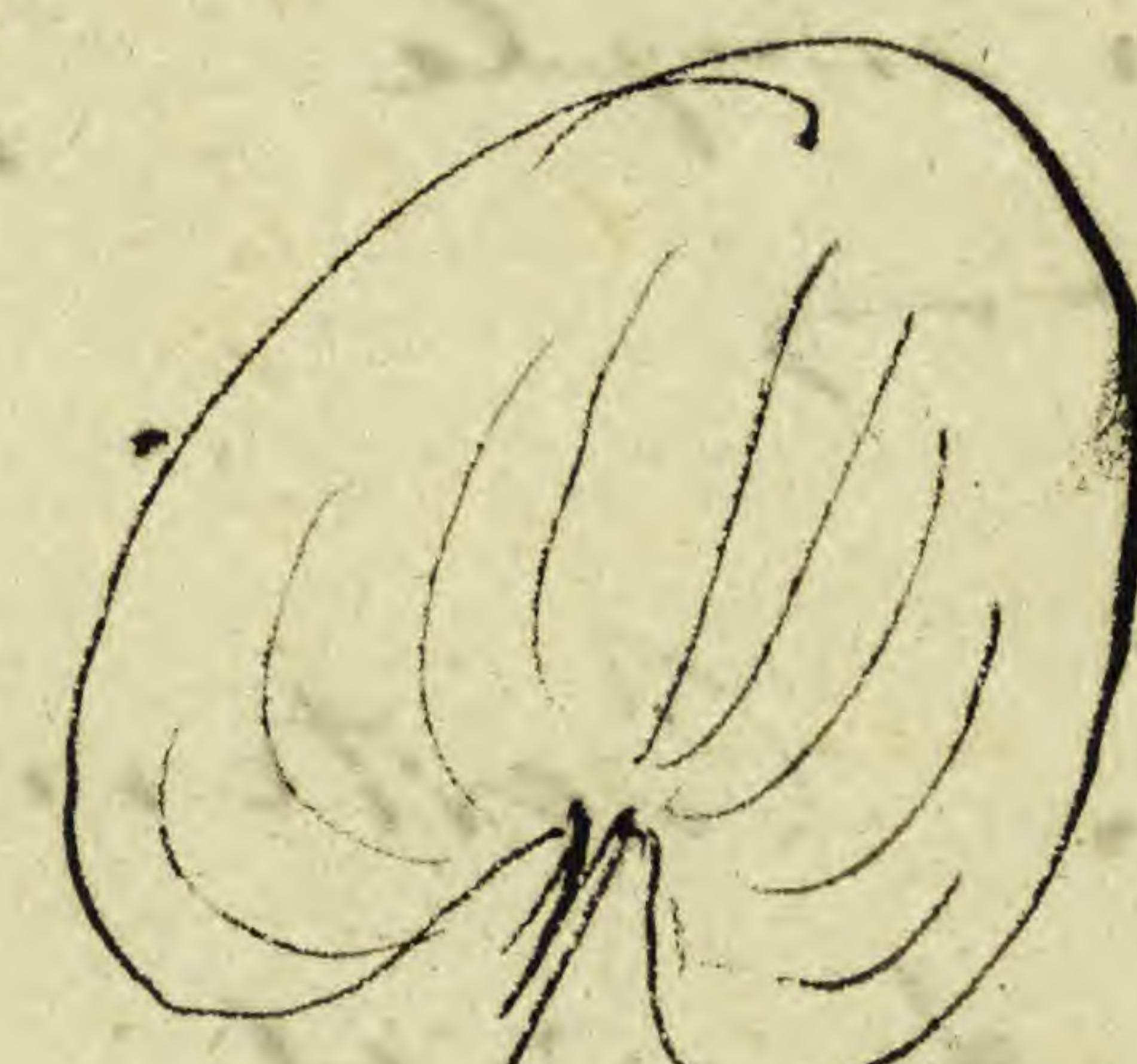
Alismum Kotschy Cordf. Kotschy 169
seems to be a sagittaria.



H. superbus minores, steriles. Herdwell plurifl.
Herdwelli pluriflori minores

Alismum floribundum. Scabrous!

Leaf ovate - reniform, 11 in.



Brazil

(8x6")

sope minores, Herdwell multifl.

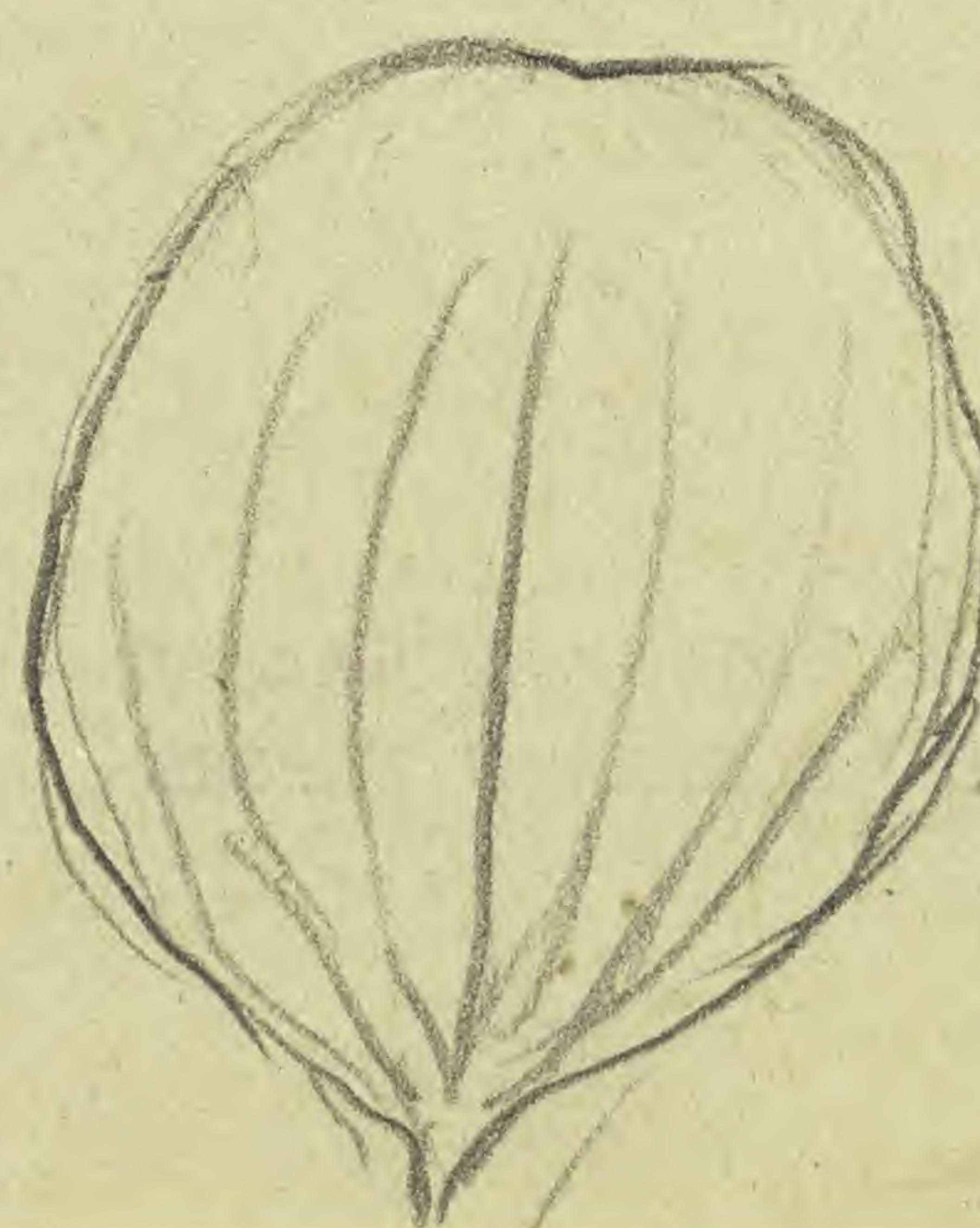
A. intermedium Mart. Brasil. Apparently
very near. subalatum, if not the same.

A. Iphigenium Spence Brasil

A. enneandrum Hochst. Kordf. Kotschy 192

fl. lanceolate. sope. minores. multiflor.

A. ellipticum Mart fl 6x8" obtuse retuse
acute at base 7 with
sope with multiflorous
herdwell,



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved

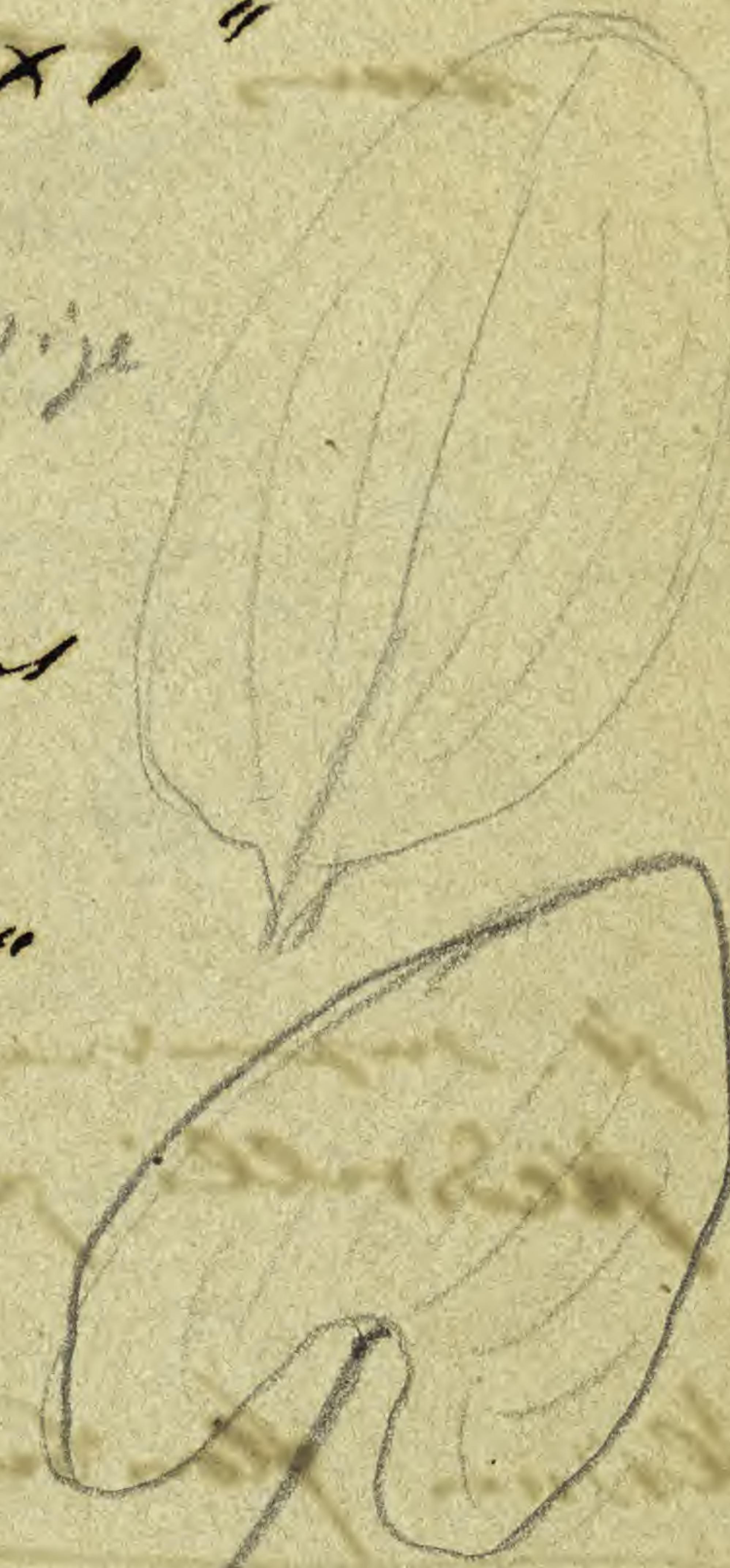


MISSOURI
BOTANICAL
GARDEN

A. elliptica var. *angustifolia*, Mart. Brazil is a
much smaller plant; leaves 2 x 1"
oblong.

nat size

"Aug. (Eichendorff) Brasilicus in "Mata
Rio Jan. Mart. leaves large
smooth, rounded 4-6" x 2-5"
shape simple, pedicels 1" long,
numerous



Alisma Berteroanum Balbis ex Schult. f.t.
A. cordifolia Lin? ex Ait sept
seems nothing but one *Eichendorffia* rotundata

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Notes made in looking through
the Alismaceae of Herb. De Candolle
Oct 6 1857

Lindley No. 1441 Merida, Venezuela, 1200 toises,
July 1843. fl. pauciflora.

An Polypodium (?) of the habit of *Alismum heterophyllum*
foliis superius ovatis, rictantibus



Alismum intermedium Mart. Seubert

St Paul, Brasil

$\frac{67}{57}$

$\frac{80}{55}$

$\frac{81}{55}$

Sagittaria

S. sagittifolia from the Garonne, leaves exactly
like our *S. varibilia* var. *litifolia* or *obtusifolia*
1 foot long obtuse, 3 inches wide.

Scapes tall, flowers only male on the
two scapes exsert. filaments subulate,
longer than the linear anthers.

S. varibilia a specimen from from "Southern
States" Dr. Welsh sent by Torrey
at the same for "Carolin Standard"
leaves with point, the obtuse, not



0
cm

1

2

3

4

5

6

7

8

9

10

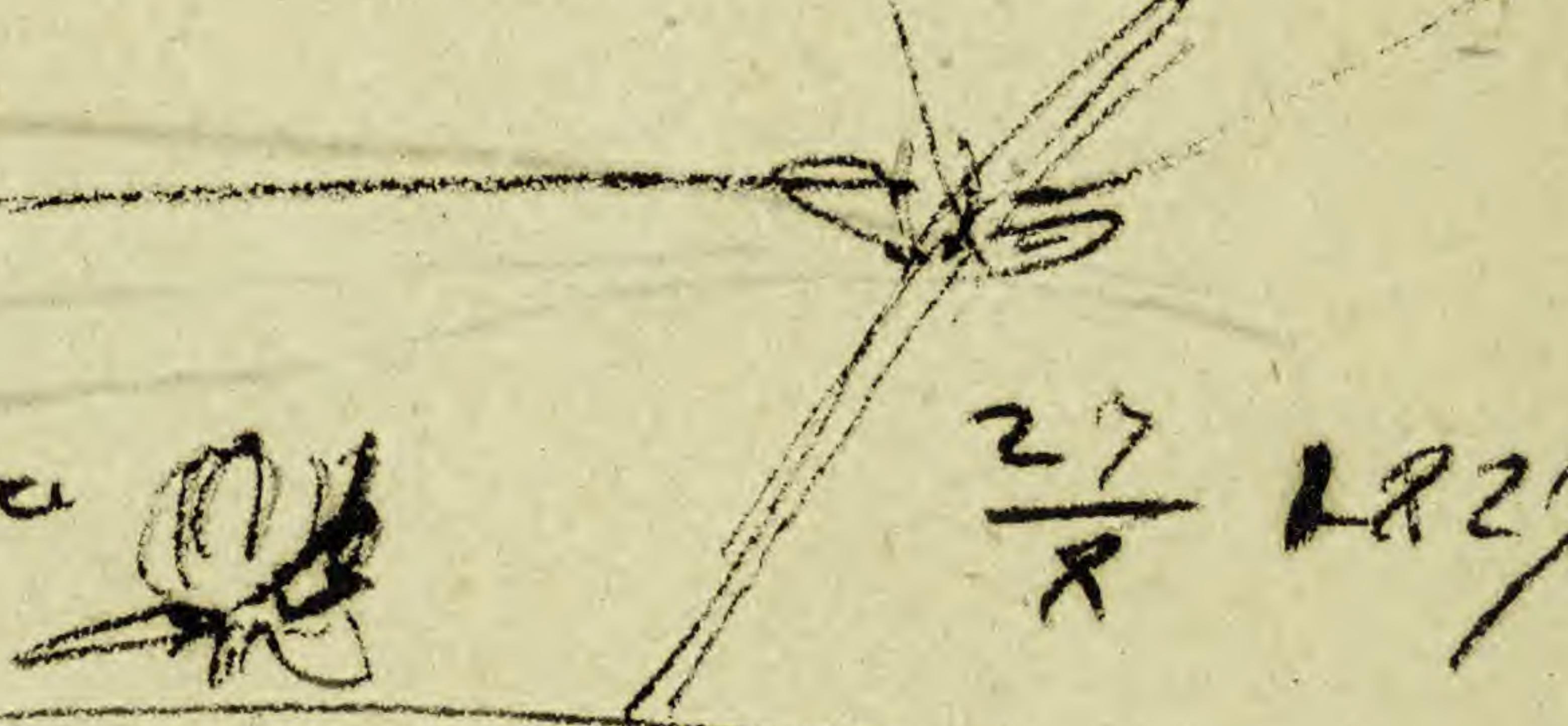
copyright reserved




MISSOURI
BOTANICAL
GARDEN

large, with parallel or divaricate lobes;
scape very slender, with long slender
pedicels, short obtuse bracts, resembling
absolutely the scape of *S. granifolia* -
but stems are entirely those of *Sag.*
variolis. Scape monostichous

No! a mixture of species! leaves of
all 1 male scape are *S. variolis*.
all the other 3 hermaphrodite scapes
belong to *S. granifolia*!!

Sagittaria Lour. var. *leucophylla* 
W. 753

27/8 1823



Schmidia radicans Caroli Bosc.
sub nom. *Sag. leucophylla*



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Segittaria cano-folia Portorico,
male & female pedicels of
equal length

1823



not
ing

1

2

3

4

5

6

7

8

9

10



0
cm

1

2

3

4

5

6

7

8

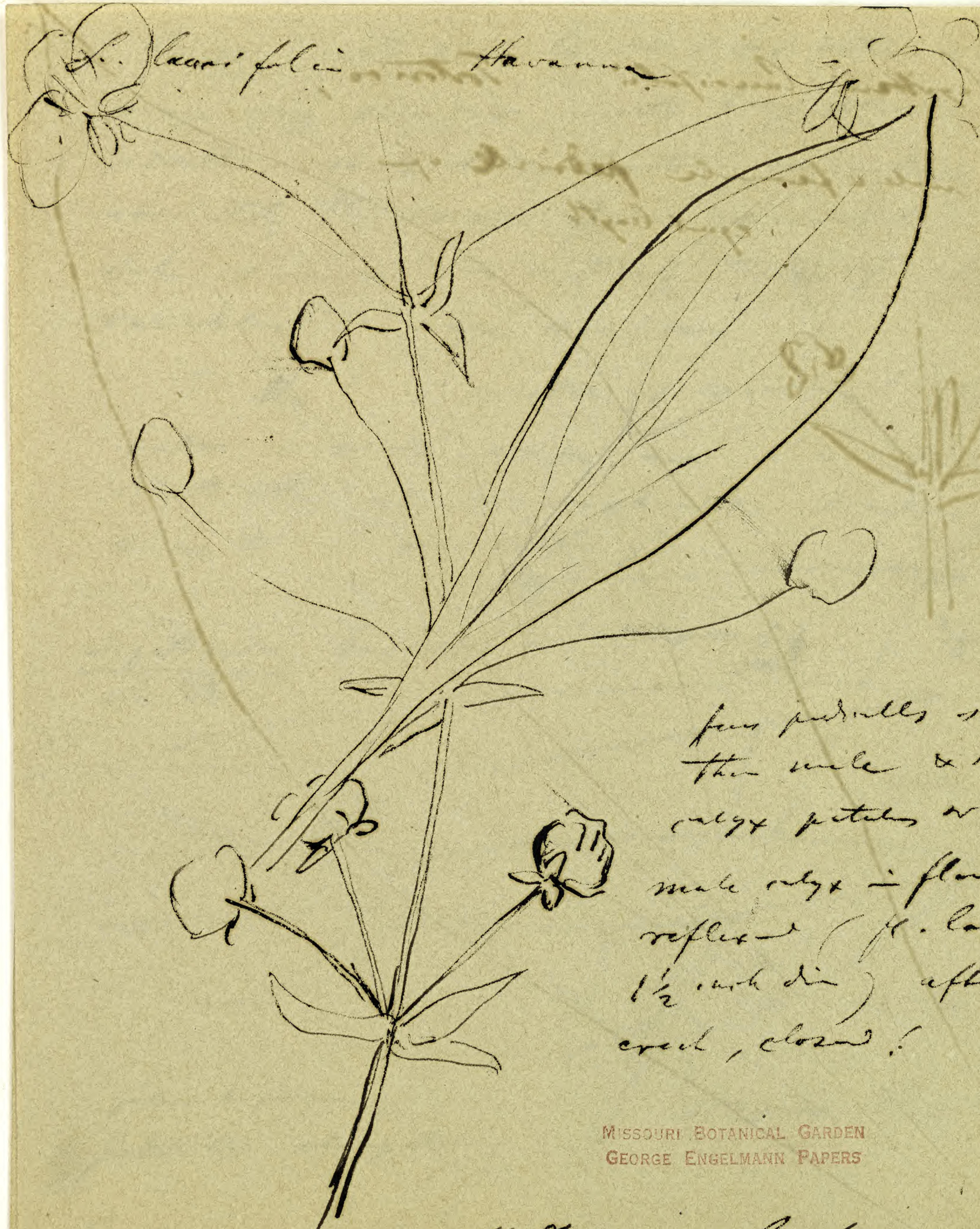
9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN



MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Similar plant to St Domingo, but more like
a small form of our paler, sage green.



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

H. De Candolle, Janv 9th 1857

L. H. foliata Cavanil. Does not
grow fast. Sparsely branched, some
branching - first flower ripe!

L. aquatilis Bot. w. Trinidad, after
at Chelsea, for where the wood is
obtained. - Leaf narrow, long, narrow,
like L. foliata - very branched ~~length~~
monostichous, fruits long (wind) canals,
inconspicuous, flowers small.

The large-flowered L. gigantea Guiana,
Shaw 156 is aquatilis L. for
Savent. - henningsianum! 12 stan.

L. Purshii Kunth is a name
L. gigantea H. B. K. for Miers



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

10152

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1 2 3 4 5 6 7 8 9 10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Herb Rossier

Octob. 1857

Sagittaria lancifolia Lin. Ill. Portsmouth Virginia
Augst — Shallow water
Leaf is the characteristic leaf, with pinnate nerves
scape branched, slender, flowers large
Johnwood parvulus sub novum *Sagittaria pusilla*
Chapman Florida
Sagittaria natans Chapman Florida. beautiful
fruity specimen showing the identity
of Russell with this. A single reflexed
petiole

Sagittaria exactly like the West Indian
S. lancifolia same form & venation
of leaf —  large branching scape
ripe fruit — from Humacao, Puerto Rico —
probably the same thing as is Her. De Cardolle

Sagittaria graminea ? Curtis is here
also, a peculiar plant: seed very
different from the plant of Michaux

Bastrop County Texas, B. Matthes N 278
is the larger form of *S. bulbosa* with
venation of leaf = *lanatifolia* — rylex
& bracts rough. —



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

10153

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Sig. H. & Sloane - H. Mus. Vienna
Jan 1858

74



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

10154

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Drummond's Sagittariae for Texas & Louisiana
found in European Herbaria 1857

at Hb. Delenat & Hb. Vienna

375 Hb. Kew V is *S. graminea* for New Orleans
376 Hb. Delenat is *S. foliata* fil. *augustin* 1" lvs. no leaves
" Hb. Kew is a mixture of *foliata* papillosa & heterophylla
377 Hb. Kew is *S. graminea* no leaves

423 Hb. Kew is *S. papillosa* sub no *S. bulbosa* Don
together with Link. no 182

Hb. Delenat also in Hb. Goettling
Hb. Vienna the same. Dr. Buchanan

424 Hb. Kew. Hb. Vienna. Hb. Delenat is *S. calycina*

435 Hb. Kew Hb. Vienna Hb. Delenat is *S. graminea*
forms.

Drummond, Bruges Hb. Kew is *S. variabilis* *augustin* pl.
Bruges " " is *S. graminea* robusta
Hb. Delenat is *S. graminea* *augustin*
Hb. Vienna is " "
" " is *graminea* major?
marked by long awl-like bracts.
of this I have taken a flower



0 1 2 3 4 5 6 7 8 9 10
cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN

American Association for the Advancement of Science.

TITLE OF COMMUNICATION.

Title No. *Section*

Received by the Permanent Secretary, 187

Abstract of the paper here recorded, received by the Permanent Secretary,
on 187 .

I propose to present the following communication at the
next meeting of the Association, which, if accepted, and the
Sectional Committee can so arrange, I should like to have on
the programme for the day of the meeting.

It will occupy about minutes.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0

1

2

3

4

5

6

7

8

9

10

cm

copyright reserved



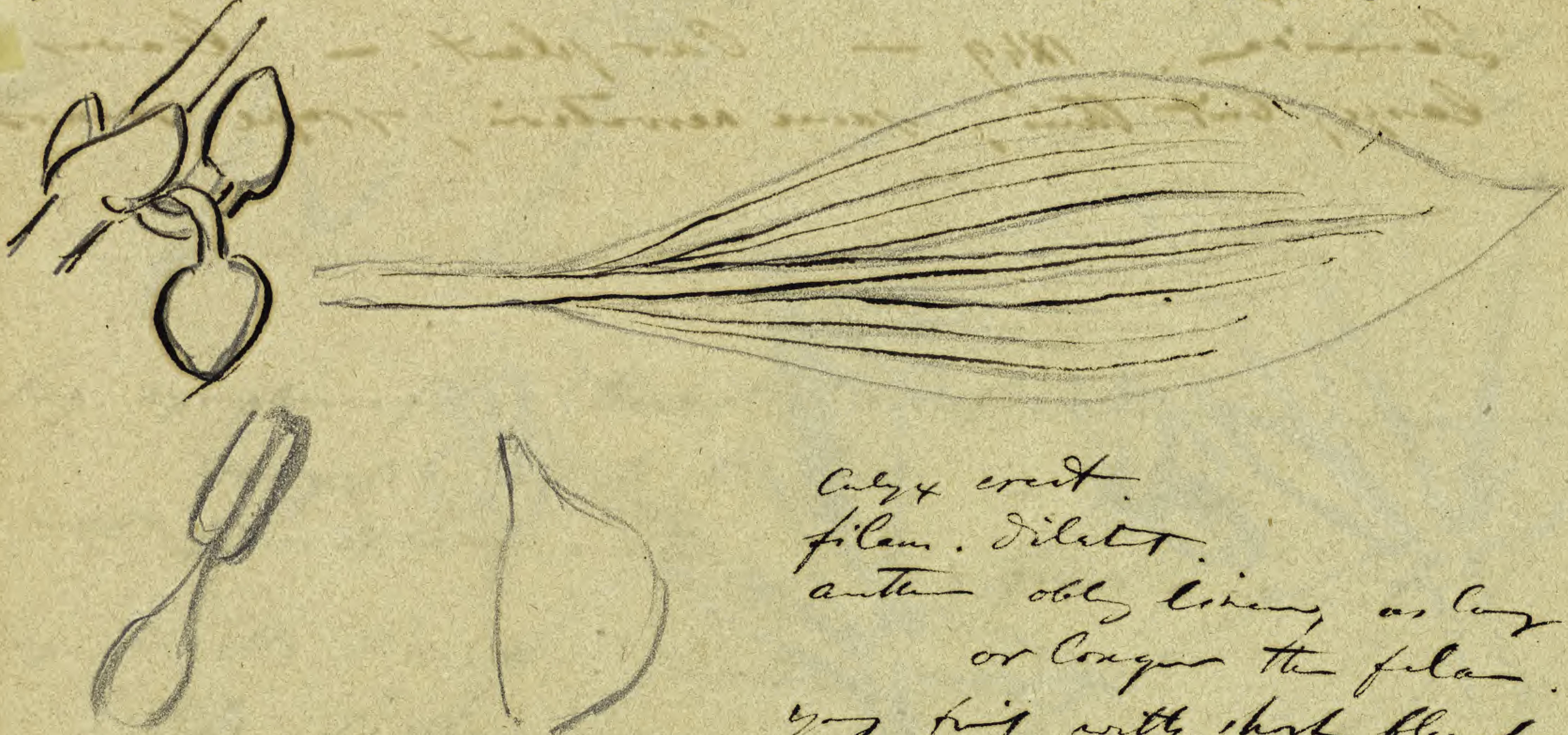
MISSOURI
BOTANICAL
GARDEN

Sagittaria Hb. var. *Monocerasis*

Nov. 1857

Sagittaria affinis Scubert.

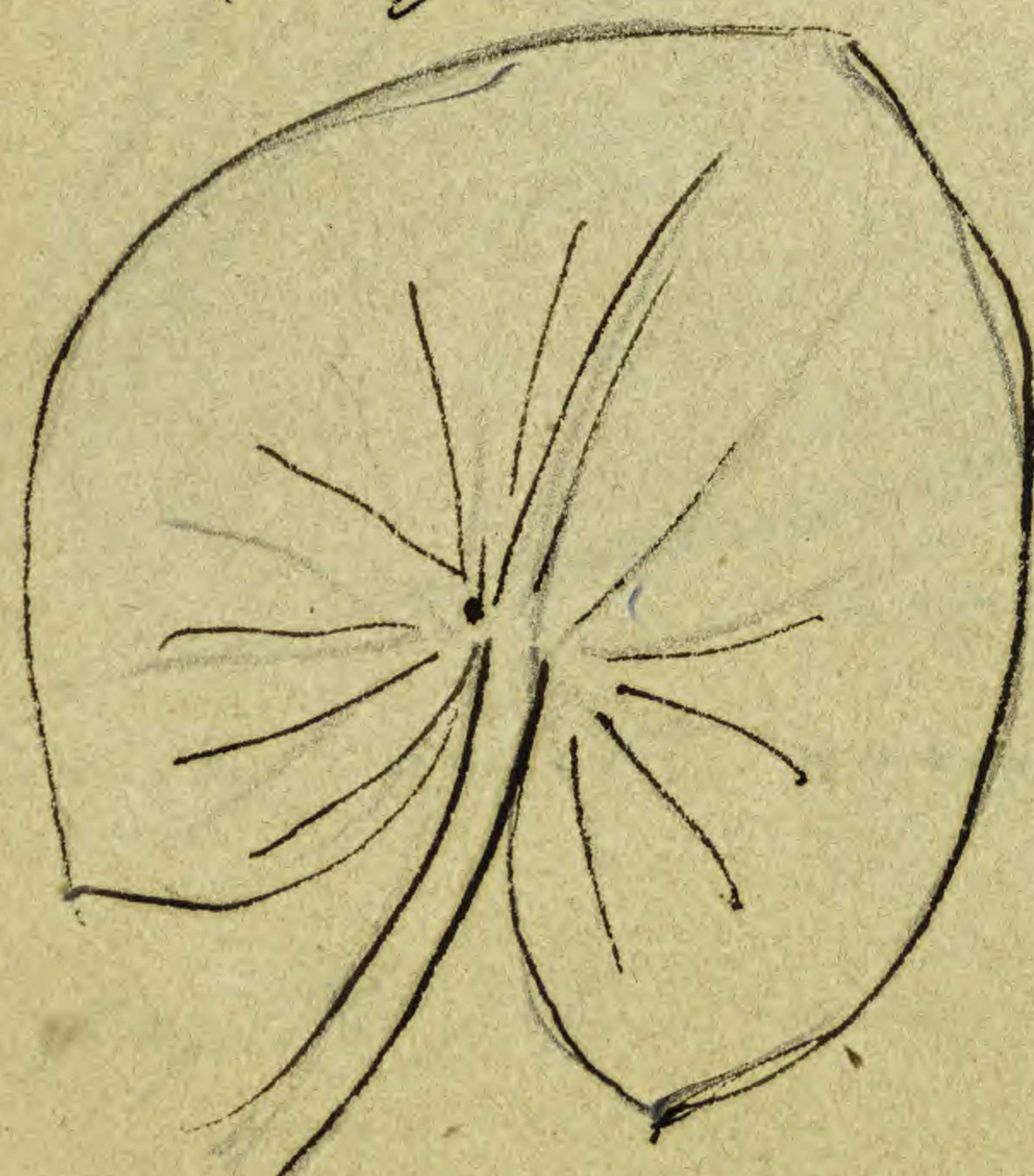
Brazil. Mato Grosso



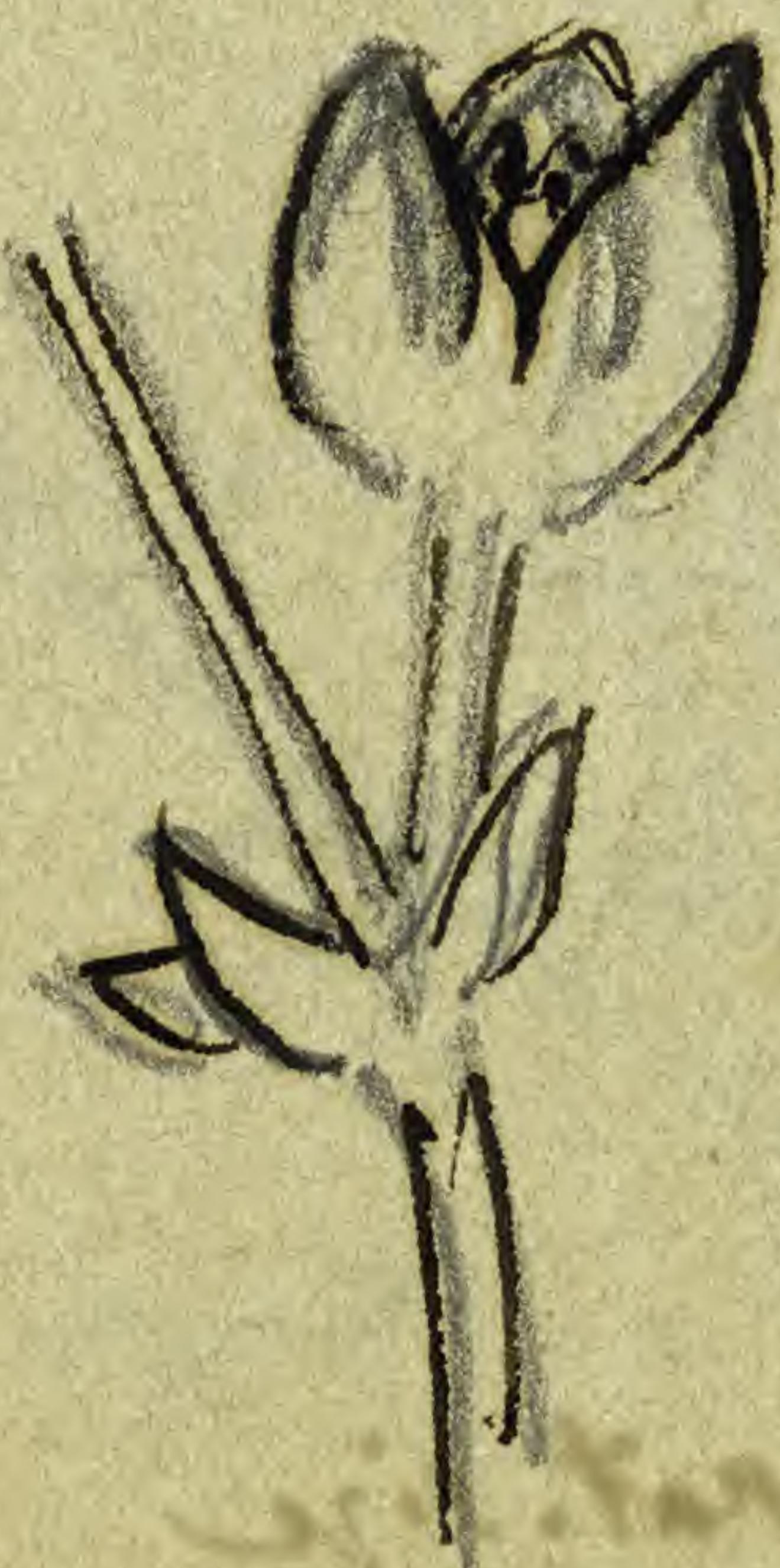
Calyx erect.
filam. dilat.
anther oblique, as long
as long as the filam.
not pubescent with short black
hairs.

Sag. echinorarpa Mart. Brazil. Pará

Misera echinorarpa Scubert. Vide Mart.
Sagittaria guyanaensis Hb.



Specim.



copied for Martin's
drawings



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

7 Stan 6-8. R. ternapordt
7 Styli nulli, stip. twice

S. canifolii N. 1037. Wallschlaeger, Bluefield
Jamaica. 1849 - Par plant. - leaves
large, but thin; same venation, grape mimoze



S. macrophylla Juss. Mexic. Kawiński



0
cm

1

2

3

4

5

6

7

8

9

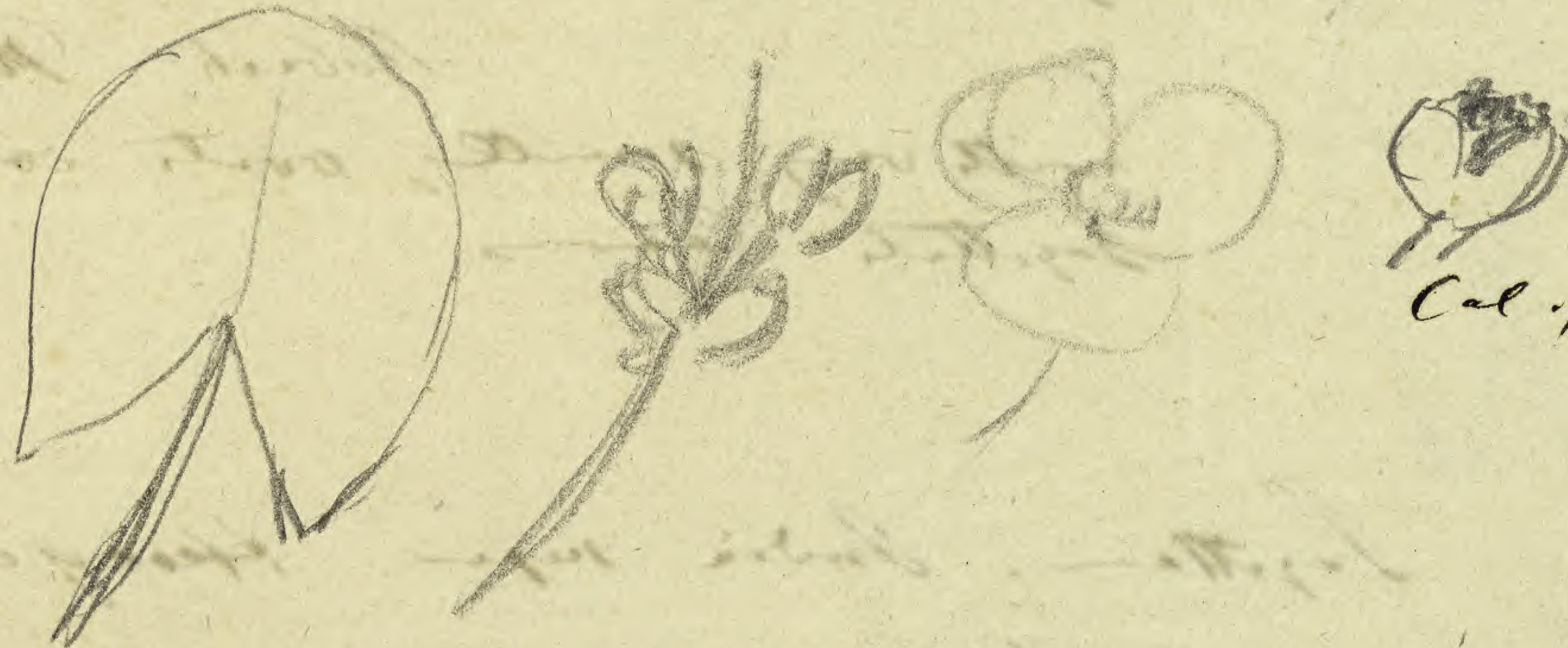
10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Sag. Martiana sub. a. Bakh.




Sag. nympheafolia Hochst. Cordof.

very similar to the last in habit
form of leaves etc., only fruitif. erat.

Sag. pusilla Pers. Benth.

as S. nympheafolia mich.

Sag. Sellowiana Kunth f. de Seneb.



leaf ~~of~~ S. laevis, rigid, un-
pinnae, bracts awl-shaped, sepals and petals

S. sagittifolia var. ciliata - S. variabilis
muscular



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Segittaria sagittifolia - Muell
Seebach, Bayer.
with very small, ovate obtuse
sagittate leaves

Segittaria. India super. Hessege
a weak desert plant, leaves
uniform - ovate, only exsert
(^{mid of} ~~part above~~) - ~~few~~ nuts
ovate

Segittaria Andr. 92 Oaxaca

hand of fit globose, even
with adpressed.

Segittaria Madagascari., - Bojer, -

probably same as the above
indian plant

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1 2 3 4 5 6 7 8 9 10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Sagittaria calycina Engelm.

12 stam

I have altered my mind
about the generic character
of this plant as I have
now think it is an
Echinadom " and if it
is nothing else I will
venture to call it *Echinadom*
Sagittrioides Hall. ~~xxx~~
x ~~xxx~~ x xx
marshy pond on Sangano
river

E. Hall Sept 1861



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN

10157



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN